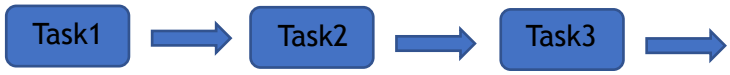
Workflow Executor

Workflow provides an infrastructure for the set-up, performance and monitoring of a defined sequence of tasks, arranged as a **workflow** application.



desc Name of the workflow
id1 = Task1
id2 = Task2
id3 = Task3
…
idN = TaskN
end
idA->idB->idC->idD->idE
idB->idD
idA->idD

List of supported commands:

1. **readfile filename**

   The command read a text file. the command input is null, output is a text from the file

2. **writefile filename**

   The command writes/appends text into a file. The command input is a text, output is null.

3. **grep word**

   Find all string lines (CR separated) which contains the word.

   Input – text, Output – text

4. **sort**

   The command does alpha-numeric desc sorting of the string lines (CR separated)

   Input – text, Output – text

5. **replace word1 word2**

   the command replaces word1 with word2 in all input text

   Input – text, Output – text

6. **synch**

   The command synchronises an execution of all sequences in different threads (until they are finished or stop on the command for waiting others) before moving to the next command in the sequence

   Input – null, Output – null

Where

id1..idN are unique positive numbers

Task1..TaskN are commands with mandatory parameters from the list of the supported commands

idA, idB, idC … idZ are positive numbers from a set of id1...idN

➔ is a link between tasks. It defines an execution sequence of the commands. Each line of the execution sequence runs in parallel (in a separate thread).

Command line to execute:

executor.exe workflow.txt

Examples:

File: workflow1.txt

```
desc example 1
1 = replace fantasy good
2 = writefile example1.out
4 = readfile example1.in
5. sort
6. grep wizard
7 = synch
end
4->5->1->7->2
4->5->6->2
```

File: workflow2.txt

```
desc example 2
1 = replace super good
2 = writefile example2.out
4 = readfile example2.0.in
5 = readfile example2.1.in
6. sort
7. grep weather
8 = synch
9 = readfile example2.2.in
End
4->1->5->8->8->2
5->7->6->2->8
9->6->8->2
```